

**REMARKS**

Entry of the foregoing and reconsideration of the application identified in caption, as amended, pursuant to and consistent with 37 C.F.R. §1.111 and in light of the remarks which follow, are respectfully requested.

At the outset, Applicants note with appreciation the indication that claims 5, 13, 25, 26, 33 and 34 contain allowable subject matter (Official Action at page 13).

By the above amendments, the abstract has been replaced with a substitute abstract which contains one paragraph. Claims 3, 4, 10, 11, 15, 16, 19-22, 28, 29 and 37-40 have been canceled without prejudice or disclaimer. In addition, by amending claims 5, 13, 25 and 26 to be in independent form, it is submitted that such claims as well as claims 33 and 34 (which depend from claims 26 and 25, respectively) are now in condition for allowance.

Claims 1, 6, 7, 12, 17, 18, 23 and 24 have been amended for readability purposes by deleting the objected-to brackets, parentheses and/or periods therein. Claims 1, 6, 7, 12, 17, 18, 23 and 24 have been amended for readability purposes to recite the term "wherein" in place of parentheses and/or brackets.

Claim 1 has been amended for readability purposes by deleting the phrase "as main components", and by replacing the phrase "their salts" with "a salt thereof". Claim 1 has also been amended for readability purposes by replacing the phrase "these bonding groups" with "the divalent bonding group". Claim 1 has further been amended for clarification purposes by deleting the phrase "an alkylene group, a phenylene group, a xylylene group, a naphthylene group, a biphenylene group".

Claim 6 has been amended for readability purposes to recite the phrase "Aqueous ink for ink jet recording according to claim 5, further comprising a dye represented by the formula (A) or a salt thereof". Claim 6 has also been amended for clarification purposes by replacing the formula (C) with the formula (A) recited in amended claim 1.

Claim 7 has been amended for readability purposes by replacing the phrase "its salt" with "a salt thereof", and to recite the phrase "to form an aqueous solution". Claim 7 has also been amended for clarification purposes by replacing the formula (C) with the formula (A) recited in amended claim 1.

Claims 8 and 9 have been amended for readability purposes to recite the phrase "The process for producing a dye according to claim 7, which further comprises", and by replacing the phrase "its salt" with "a salt thereof". Claims 8 and 9 have also been amended to replace the term "formula (C)" with "formula (A)" to be consistent with the above amendment of claim 7.

Claim 12 has been amended to replace the term "formula (C)" with "formula (A)" consistent with the above amendment of claim 9. Claims 14, 27 and 30-36 have been amended for readability purposes by replacing the phrase "characterized by containing at least one of the dyes" with "wherein the ink comprises at least one dye".

New independent claim 41 has been added which is directed to an additional aspect of the present invention. Support for such new claim can be found in the specification at least at page 8, lines 15 and 16 (which states that  $R_1$  and  $R_3$  can independently represent a hydrogen

atom, hydroxyl group or a halogen atom), taken in connection with page 16, lines 21-24 (which states that in one embodiment, at least one of  $R_1$  and  $R_3$  is a halogen atom).

In the Official Action, the abstract and claims 1, 4, 6, 7, 10, 12, 14, 16-20, 23, 24 and 27-40 stand objected to for the reasons set forth at pages 2-4 of the Official Action. These objections have been obviated by the above submission of the substitute abstract and various claim amendments made for readability purposes. Accordingly, withdrawal of the objections is respectfully requested.

Claim 6 stands rejected under 35 U.S.C. §112, second paragraph, for the reasons discussed at page 4 of the Official Action. This rejection has been obviated by the above amendment of claim 6 in which the objected-to language has been deleted. For at least this reason, withdrawal of the §112 rejection is respectfully requested.

Claims 1-3, 6 and 15 stand rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 5,843,217 (*Ueda et al*). Withdrawal of this rejection is respectfully requested for at least the following reasons.

*Ueda et al* relates to an ink for ink-jetting which contains the water-soluble dye represented by the general formula (A) at column 2 thereof. *Ueda et al* discloses that in the general formula (A), X represents substituted or unsubstituted phenylene group, substituted or unsubstituted diphenylene group, substituted or unsubstituted naphthylene group, or that " $NR_3-X-R_3N-$ " in the general formula (A) represents a "1,4-pyperazinylene group" (col. 2, lines 25-29).

*Ueda et al* does not disclose each feature of one aspect of the present invention as defined by claim 1, and as such, fails to constitute an anticipation of such claim. For example, *Ueda et al* does not disclose a dye represented by the recited formula (A) or a salt thereof, wherein X represents an optionally substituted divalent bonding group represented by the formula (2), as recited in claim 1.

In this regard, "X" in *Ueda et al*'s general formula (A) appears to be in the same position as "X" in the claimed formula (A). However, *Ueda et al* has no disclosure that "X" in formula (A) represents an optionally substituted divalent bonding group represented by the formula (2), let alone wherein Z represents -CO-, -NHCONH-, -NHCSNH- or formula (3).

For at least the above reasons, it is apparent that *Ueda et al* does not anticipate claim 1. Accordingly, withdrawal of this §102(b) rejection is respectfully requested.

Claims 1-3, 6 and 15 stand rejected under 35 U.S.C. §102(b) as being anticipated by International Publication No. WO 94/16021 (*WO '021*). Withdrawal of this rejection is respectfully requested for at least the following reasons.

*WO '021* relates to azo compounds which are useful as the colorants for inks, especially inks used in ink jet printing. *WO '021* discloses a compound of Formula (1) and salts thereof, wherein "L" in Formula (1) represents Formula (3a) or (3b) (page 1, lines 4-26).

*WO '021* does not disclose each feature of one aspect of the present invention as defined by claim 1, and as such, fails to constitute an anticipation of such claim. For example, *WO '021* does not disclose a dye represented by the recited formula (A) or a salt thereof, wherein

X represents an optionally substituted divalent bonding group represented by the formula (2), as recited in claim 1.

In this regard, "L" in the Formula (1) of *WO '021* appears to be in the same position as " $-R_4N-X-NR_2-$ " in the formula (A) recited in claim 1. In stark contrast with the claimed formula (A), *WO '021* discloses that "L" represents Formula (3a) or (3b) shown on page 1 thereof. Clearly, such Formula (3a) or (3b) is not the same as " $-R_4N-X-NR_2-$ " in the claimed formula (A), wherein X represents the optionally substituted divalent bonding group represented by the formula (2). *WO '021* also fails to disclose X wherein Z represents  $-CO-$ ,  $-NHCONH-$ ,  $-NHCSNH-$  or formula (3), as recited in claim 1.

For at least the above reasons, it is apparent that *WO '021* fails to anticipate claim 1. Accordingly, withdrawal of this §102(b) rejection is respectfully requested.

Claims 1, 6-10, 19, 20, 29-32, 39 and 40 stand rejected under 35 U.S.C. §102(b) as being anticipated by International Publication No. WO 00/15723 (*WO '723*). Withdrawal of this rejection is respectfully requested for at least the following reasons.

*WO '723* relates to compositions, to inks and to dyes and to their use in ink jet printing. *WO '723* discloses a dye of the Formula (1), wherein L is optionally interrupted alkylene, optionally substituted by halo or  $-OH$ , wherein the optional interruption(s) are selected from  $-O-$ ,  $-S-$ ,  $-NR^1-$ ,  $-CR^1=CR^1-$ ,  $-C(O)-$  and  $-C(O)O-$  (page 1, lines 18-28).

*WO '723* fails to disclose each feature of aspects of the present invention as defined by claims 1 and 7. For example, *WO '723* does not disclose a dye represented by the claimed

formula (A) or a salt thereof, wherein X represents an optionally substituted divalent bonding group represented by the formula (2), as recited in claims 1 and 7.

In this regard, "L" in the Formula (1) of *WO '723*, which represents an optionally interrupted alkylene, appears to be in the same position as "X" in the claimed formula (A). Clearly, the optionally interrupted alkylene disclosed by *WO '723* is not the same as the optionally substituted divalent bonding group represented by the formula (2), let alone wherein Z represents -CO-, -NHCONH-, -NHCSNH- or formula (3).

For at least the above reasons, it is apparent that *WO '723* does not anticipate claims 1 and 7. Accordingly, withdrawal of this §102(b) rejection is respectfully requested.

Claims 1, 3, 4, 6 and 15-18 stand rejected under 35 U.S.C. §102(b) as being anticipated by European Patent Document No. 0 325 041 (*EP '041*). Withdrawal of this rejection is respectfully requested for at least the following reasons.

*EP '041* relates to a water-soluble dye and to an ink containing the dye, the ink being suitable for use in ink jet printing. *EP '041* discloses the water-soluble dye at page 3, lines 10-30 thereof.

*EP '041* does not disclose each feature of one aspect of the present invention defined by claim 1, and as such, fails to constitute an anticipation of such claim. For example, *EP '041* does not disclose a dye represented by the claimed formula (A) or a salt thereof, wherein X represents an optionally substituted divalent bonding group represented by the formula (2), as recited in claim 1.

In this regard, the phenylene group in *EP '041*'s water-soluble dye appears to be in the same position as "X" in the claimed formula (A). Clearly, such phenylene group is not the same as the optionally substituted divalent bonding group represented by the formula (2) recited in claim 1, let alone wherein Z represents -CO-, -NHCONH-, -NHCSNH- or formula (3).

For at least the above reasons, it is apparent that *EP '041* does not anticipate claim 1. Accordingly, withdrawal of the §102(b) rejection is respectfully requested.

Claims 4 and 16-18 stand rejected under 35 U.S.C. §103(a) as being obvious over *WO '021*. Withdrawal of this rejection is respectfully requested for at least the following reasons.

The deficiencies of *WO '021* are discussed above with regard to the §102(b) rejection based on *WO '021*.

The Patent Office has asserted that it would have been obvious to modify *WO '021* by using naphthyl groups in the "Ar<sup>1</sup>" and "Ar<sup>2</sup>" positions of the Formula (1) of *WO '021* (Official Action at page 10). Without addressing the propriety of this assertion, it is noted that *WO '021* fails to disclose the claimed formula (A) recited in claim 1, wherein X represents an optionally substituted divalent bonding group represented by the formula (2). Absent an improper resort to Applicants' own disclosure, one of ordinary skill in the art would not have been motivated to modify *WO '021* to arrive at the claimed formula (A).

For at least the above reasons, it is apparent that no *prima facie* case of obviousness exists. Accordingly, withdrawal of this §103(a) rejection is respectfully requested.

Claim 2 stands rejected under 35 U.S.C. §103(a) as being obvious over *WO '723*.  
Withdrawal of this rejection is respectfully requested for at least the following reasons.

The deficiencies of *WO '723* are discussed above with regard to the §102(b) rejection based on such document.

The Patent Office has asserted that it would have been obvious to modify *WO '723* by using halogen groups in the Z positions of the Formula (1) of *WO '723* (Official Action at page 10). Without addressing the propriety of this assertion, it is noted that *WO '723* fails to disclose the claimed formula (A) recited in claim 1, wherein X represents an optionally substituted divalent bonding group represented by the formula (2). Moreover, no motivation or suggestion exists to modify *WO '723* to arrive at the claimed formula (A).

For at least the above reasons, it is apparent that no *prima facie* case of obviousness exists. Accordingly, withdrawal of this §103(a) rejection is respectfully requested.

Claims 7-12, 14, 19-24, 27-32 and 35-40 stand rejected under 35 U.S.C. §103(a) as being obvious over *EP '041* in view of *WO '723*. Withdrawal of this rejection is respectfully requested for at least the following reasons.

The deficiencies of *EP '041* and *WO '723* are discussed above with regard to the §102(b) rejections based on such documents.

The Patent Office has asserted that it would have been obvious to prepare the water-soluble azo dye of *EP '041* by the method of preparing an azo dye disclosed by *WO '723* (Official Action at page 11). Without addressing the propriety of this assertion, it is noted that *EP '041* and *WO '723* fail to disclose the claimed formula (A) recited in claim 7, wherein X



represents an optionally substituted divalent bonding group represented by the formula (2). Absent an improper resort to Applicants' own disclosure, one of ordinary skill in the art would not have been motivated to modify such documents to arrive at the claimed formula (A).

For at least the above reasons, it is apparent that no *prima facie* case of obviousness exists. Accordingly, withdrawal of this §103(a) rejection is respectfully requested.

Claims 1-4, 6 and 15-18 stand rejected under 35 U.S.C. §103(a) as being obvious over U.S. Patent No. 5,925,746 (*Lauk et al*). Withdrawal of this rejection is respectfully requested for at least the following reasons.

*Lauk et al* relates to azo dyes, to processes for their preparation and to the use thereof for dyeing and printing fiber materials, especially textile fiber materials. *Lauk et al* discloses an azo dye of the formula (1) set forth at column 1, lines 15-40.

*Lauk et al* does not disclose or suggest each feature of one aspect of the present invention defined by claim 1. For example, *Lauk et al* does not disclose or suggest a dye represented by the claimed formula (A) or a salt thereof, wherein X represents an optionally substituted divalent bonding group represented by the formula (2).

In this regard, it appears that "-CO-NH-" in *Lauk et al*'s formula (1) azo dye, is in the same position as "Z" in the claimed formula (A). Clearly, the disclosed "-CO-NH-" is not the same as or suggestive of the recited Z which represents -CO-, -NHCONH-, -NHCSNH- or formula (3). Moreover, absent an improper resort to Applicants' own disclosure, one of ordinary skill in the art would not have been motivated to modify *Lauk et al* to arrive at the formula (A) recited in claim 1.

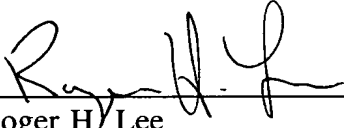
For at least the above reasons, it is apparent that no *prima facie* case of obviousness exists. Accordingly, withdrawal of the §103(a) rejection is respectfully requested.

The Patent Office has noted that Applicants have not filed certified copies of the foreign priority documents (Official Action at page 2). In this regard, it is respectfully noted that the present application is a national stage application filed under 35 U.S.C. §371. As discussed in M.P.E.P. §1893.03(c), the International Bureau normally forwards to the Patent Office certified copies of the foreign priority documents in connection with §371 applications. Accordingly, the Patent Office is respectfully requested to acknowledge receipt of such certified copies presumed to be forwarded to the Patent Office from the International Bureau.

From the foregoing, further and favorable action in the form of a Notice of Allowance is believed to be next in order, and such action is earnestly solicited. If there are any questions concerning this paper or the application in general, the Examiner is invited to telephone the undersigned.

Respectfully submitted,

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